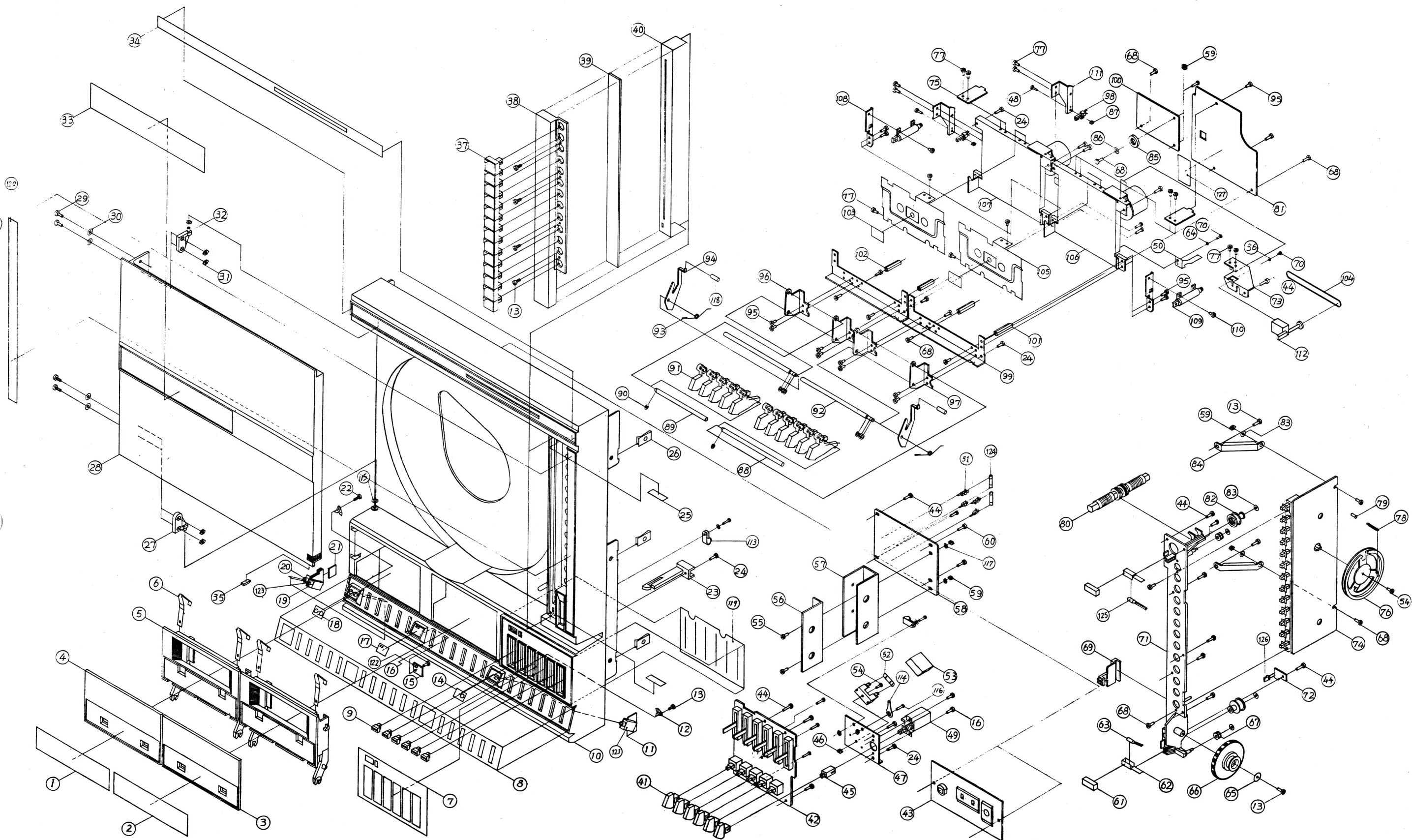


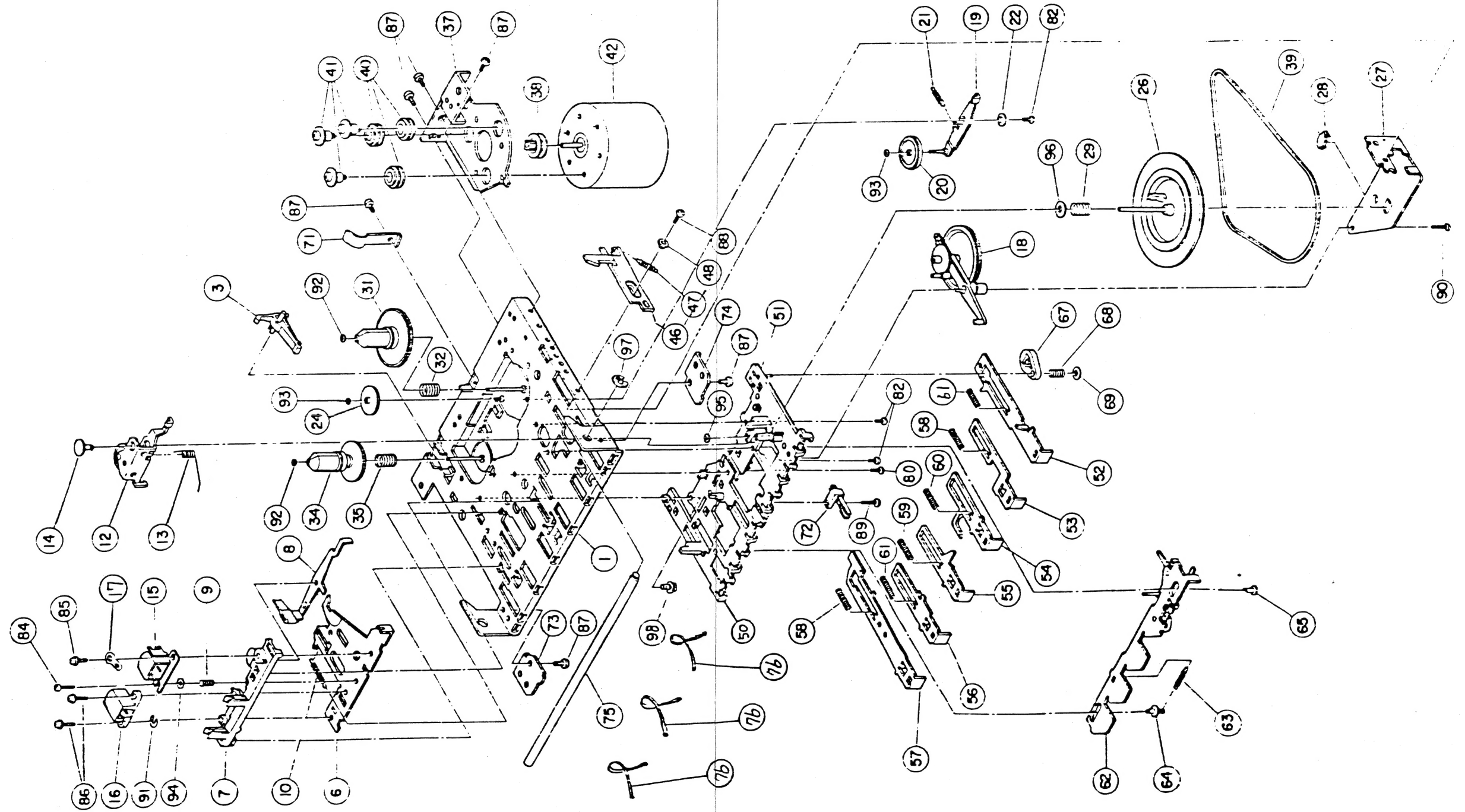
Bestell-Nr./Part No.	Bezeichnung	Description	Pos.-Nr./Ref. No.
29 010 00-4295	Cassettenaufbew.-Fachabdeckung	Cass. compartment door window	2
29 011 00-4312	Cassettenaufbew.-Fachdeckel	Cass. compartment door	3
29 012 00-5903	Frontblende VAL 1000	Escutcheon	5
29 013 00-4282	Knopf Cassettenaufbew.-Fach	Compartment door open knob	7
29 014 00-416	Feder Cassettenaufbew.-Fach	Compartment door open knob spring	8
29 015 00-4299	Hebel Fachöffner	Compartment door lever	9
29 016 00-4299	Cassettenaufbew.-Fach	Cass. storage compartment	14

Explosionsdarstellung
Exploded view

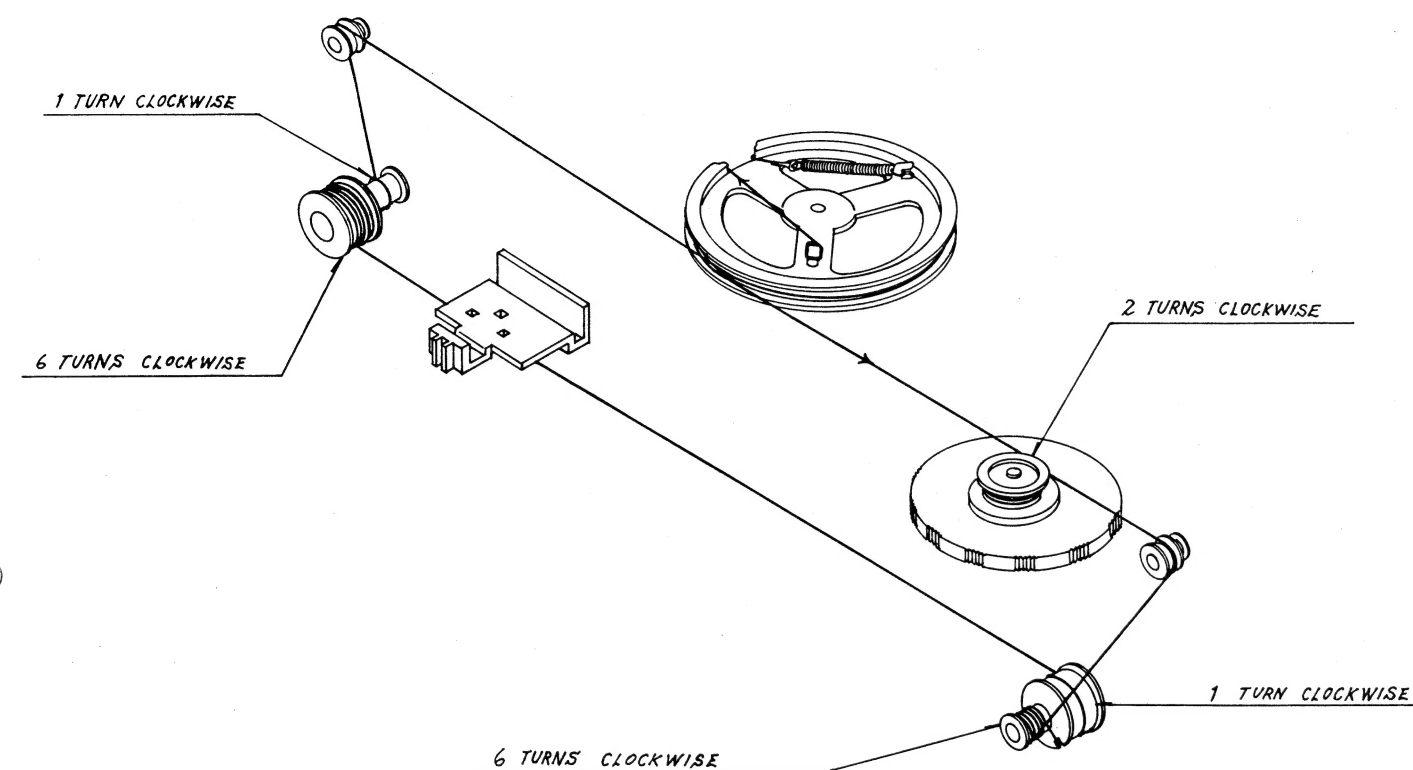


Explosionsdarstellung Cassette

Exploded view cassette



Seilführung
Stringing diagram

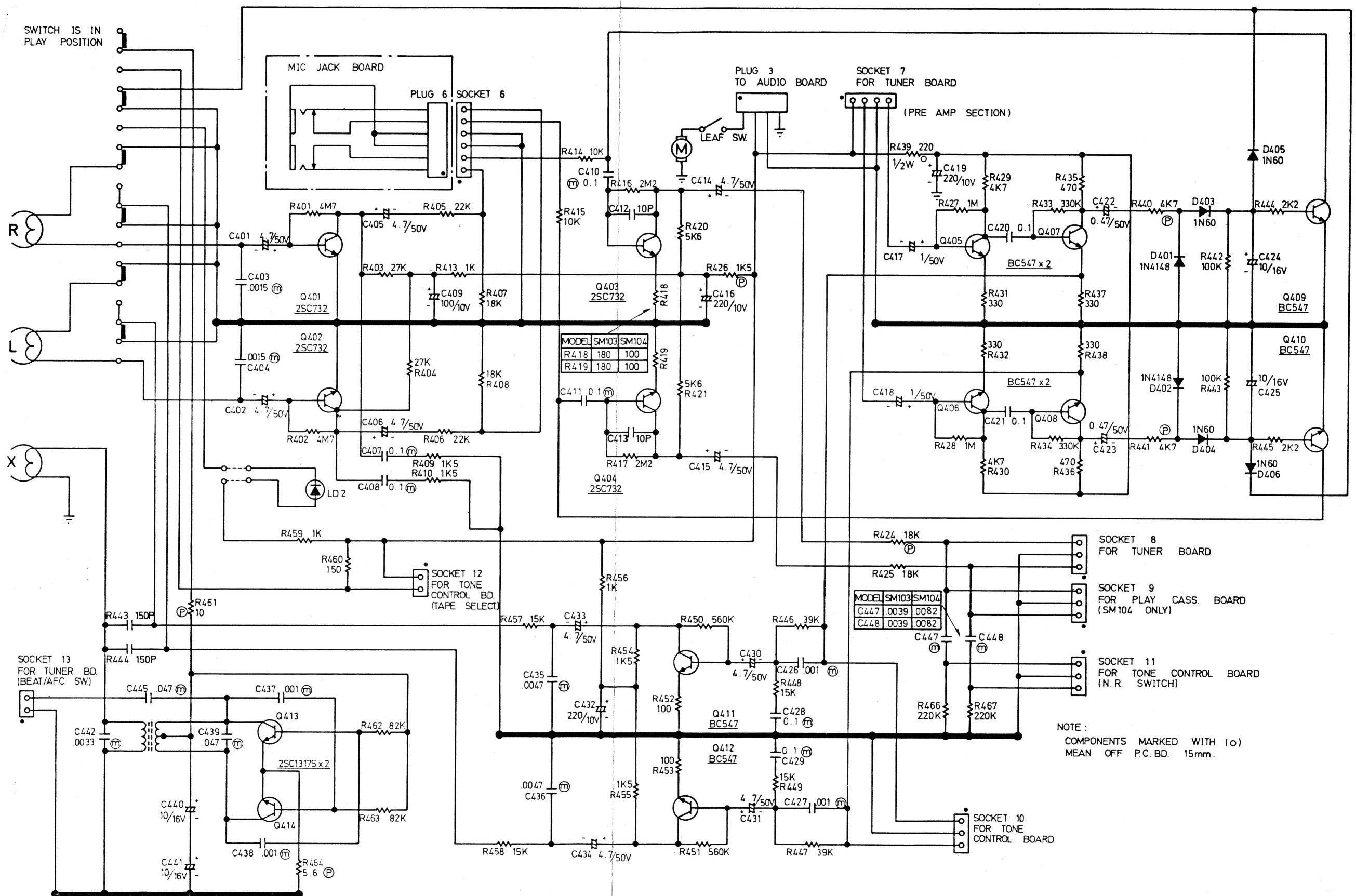


Bestell-Nr./Part No.	Bezeichnung	Description	Pos.-Nr./Ref. No.
26 039 00-4295	Cassettenfachabdeckung TAPE 1	Cass. door window TAPE 1 (VAL 1002)	3
26 784 00-4295	Cassettenfachabdeckung VAL 1000	Cass. door window (VAL 1000)	3
29 044 00-4295	Cassettenfachabdeckung TAPE 2	Cass. door window TAPE 2 (VAL 1002)	4
26 785 00-4312	Cassettenfachdeckel	Cass. door	5
26 786 00-4164	Blattfeder	Door spring plate	6
26 787 00-4284	Knopf Schieberegl.	Slide control knob	9
29 045 00-5903	Frontblende VAL 1002	Escutcheon	10
26 972 00-4294	Halter Abdeckhaube	Dust cover holder	23
26 973 00-445	Haubenscharnier unten	Dust cover lower hinge	27
26 974 00-422	Abdeckhaube	Dust cover	28
26 975 00-445	Haubenscharnier oben	Dust cover upper hinge	32
26 792 00-4282	Knopf Funktionstaste	Function knob	37
26 976 00-4251	Skalenabdeckung	Dial lens	38
26 977 00-4251	Skalenscheibe FM	Dial scale lens	39
26 978 00-4251	Skalenscheibe MW/LW	Dial inlay	40
26 979 00-4282	Knopf Taste	Push button knob	41
26 981 00-4295	Adapter Netzschalter	Power knob buffer	45
26 982 00-3273	Netzschalter	"ALPS" Power switch SDL 1 P	49
26 985 00-4281	Knopf Abstimm	Tuning knob	66
26 986 00-4273	Führungsrolle	Guide pulley	67
26 987 00-4271	Zeiger	Pointer	69
26 990 00-427	Seilrad	Dial drum	76
26 991 00-4126	Seilzugfeder	Dial spring 3 x 14 x 0.3	78
26 994 00-4273	Seilrolle	Reduction pulley	82
26 995 00-4282	Knopf Cassette	Cassette key knob	91
26 996 00-416	Feder Cassettenfach	Door spring	93
26 997 00-4295	Hebel für Dämpfer	Damping fork lever	94
26 998 00-327	Mikroschalter	Leaf switch (SM 104) play/rec deck parts	98
29 000 00-4152	Zählwerkriemen	"TANASHIN" Counter belt 52 x 0.8 MM	104
29 001 00-501	Cass.-Mechanik A/W	Cassette deck TN 33 ZFC "A" (103 only)	106
29 002 00-501	Cass.-Mechanik Wiedergabe	Cass. deck TN 33 ZFC "B" play (104-SN only)	107
29 003 00-501	Dämpfer	Damping	109
29 004 00-4272	Zählwerk	Tape counter MB-M 3- 8 K-20	112

Bestell-Nr./Part No.	Bezeichnung	Description	Pos.-Nr./Ref. No.
29 001 00-501	Cassette mech. A/W	Cass. deck TN 33 ZFC	1
29 002 00-501	Cassette mech. Wiedergabe	Cass. deck TN 33 ZFC	
22 950 00-4191	Montageplatte mech.	Chassis assembly	
21 437 00-4197	Sperrhebel Aufnahme	Record safety lever	3
22 951 00-4192	Kopfträgerplatte	Headbase	7
21 438 00-4197	Abschaltfühler	Sensing plate assembly	8
21 439 00-416	Feder A/W-Kopf	Spring	9
26 881 00-416	Feder Kopfschlitten	Head panel spring	10
21 441 00-501	Bandandruckrolle kpl.	Pinch roller assembly	12
29 069 00-416	Feder BA-Rolle	Spring	13
26 885 00-429	Stopper BA-Rolle	Pinch roller arm stopper	14
29 070 00-32831	A/W-Kopf	R.P. head	15
29 071 00-32831	Löschkopf	E. head	16
21 446 00-4299	Rutschkupplung	RF-pulley arm assembly	18
29 072 00-429	Zwischenradarm	Take-up roller arm assembly	19
21 447 00-429	Zwischenrad	Take-up roller assembly	20
21 448 00-416	Feder Zwischenrad	Spring	21
21 449 00-429	Zahnrad Vorlauf	FF gear	24
21 450 00-418	Schwungmasse	Flywheel assembly	26
21 800 00-4182	Schwungmassehalter	Flywheel holder	27
21 582 00-416	Feder Schwungmasse	Flywheel plate	28
21 452 00-429	Wickelteller rechts	Spring	29
21 584 00-416	Feder Wickelteller rechts	Take-up reel assembly	31
21 585 00-429	Wickelteller links	Spring	32
21 455 00-416	Feder Wickelteller links	Supply reel assembly	34
21 587 00-418	Motorpulley	Motor pulley	38
21 588 00-4152	Antriebsriemen	Main belt	39
13 590 00-328	Antriebsmotor	Motor	42
29 076 00-429	Hebel Eject	Eject slide lever	48
29 077 00-416	Feder Hebel Eject	Spring	49
26 897 00-4197	Auslösehebel	Push button actuator assembly	62
26 898 00-416	Feder für Auslösehebel	Spring	63
21 805 00-418	Bolzen	Actuator shaft (B)	64
22 946 00-418	Fixierstift	Actuator shaft	65
21 031 00-419	Schalthebel Pause	Pause lever	67
29 073 00-416	Feder	Spring	68
21 033 00-429	Stopper Schalth. Pause	Pause lever stopper	69
21 006 00-416	Cassettenandruckfeder	Pack spring	71
21 590 00-327	Mikroschalter	Leaf switch	72
29 074 00-4163	Feder Taste	Button knob spring	76
29 075 00-407	Sicherungsscheibe Wickelt.	P washer cut	92
26 904 00-407	Sicherungsscheibe Zahn.	P washer cut	93
26 905 00-4069	Scheibe Schwungmasse	Nylon washer	96

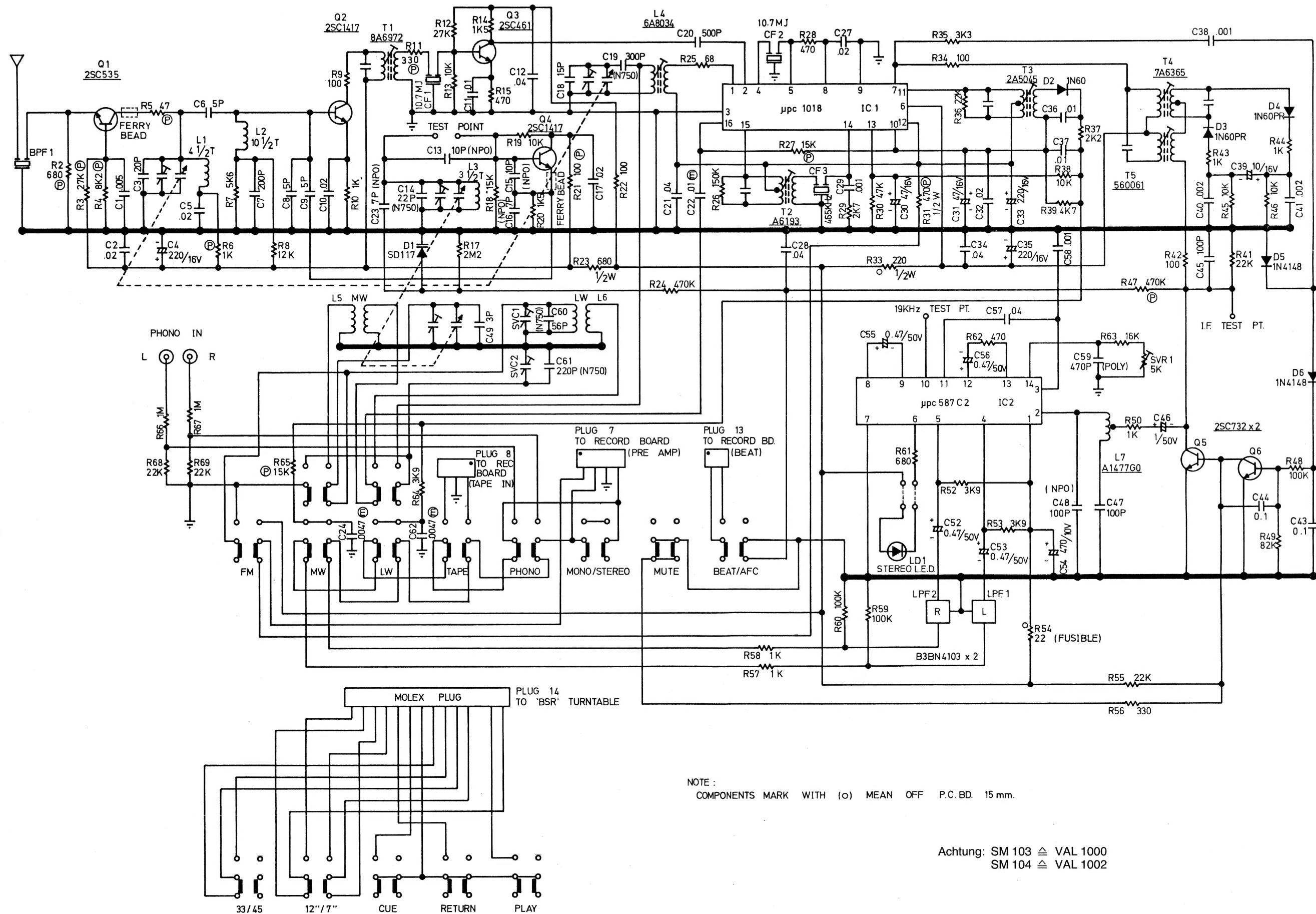
Schaltbild A/W-Cassettenteil

Circuit diagram rec./play-cass.-deck



Schaltbild Receiver

Circuit diagram receiver



NOTE :
COMPONENTS MARK WITH (o) MEAN OFF P.C.BD. 15 mm.

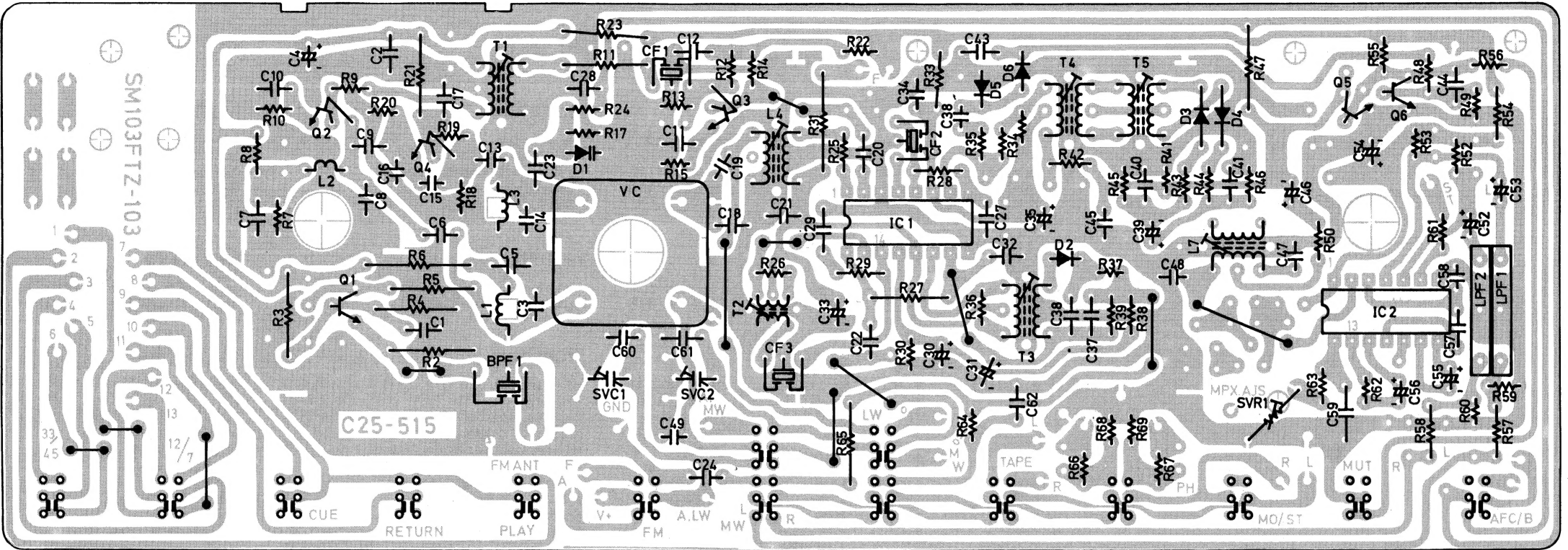
Achtung: SM 103 \triangle VAL 1000
SM 104 \triangle VAL 1002

Bestell-Nr./Part No.	Bezeichnung	Description	Pos.-Nr./Ref. No.
IC's			
29 017 00-302	IC HA 12003		IC 2
16 675 00-302	IC TDA 2030 SGS		IC 3
16 675 00-302	IC TDA 2030 SGS		IC 4
08 065 00-302	IC UPC 1018 C NEC		IC 1
Transistoren			
Transistors			
03 395 00-301	Trans 2 SC 535-C		Q 1
29 018 00-301	Trans 2 SC 1417-H		Q 2
29 018 00-301	Trans 2 SC 1417-H		Q 4
03 392 00-301	Trans 2 SC 461 B		Q 3
29 019 00-301	Trans 2 SC 732 TM-BL		Q 5
29 019 00-301	Trans 2 SC 732 TM-BL		Q 6
29 019 00-301	Trans 2 SC 732 TM-BL		Q 401
29 019 00-301	Trans 2 SC 732 TM-BL		Q 402
29 019 00-301	Trans 2 SC 732 TM-BL		Q 403
29 019 00-301	Trans 2 SC 732 TM-BL		Q 404
29 019 00-301	Trans 2 SC 732 TM-BL		Q 201
29 020 00-301	Trans 2 SD 471-L		Q 301
29 021 00-301	Trans BC 547 C		Q 302
29 021 00-301	Trans BC 547 C		Q 405
29 021 00-301	Trans BC 547 C		Q 406
29 021 00-301	Trans BC 547 C		Q 407
29 021 00-301	Trans BC 547 C		Q 408
29 021 00-301	Trans BC 547 C		Q 409
29 021 00-301	Trans BC 547 C		Q 410
29 021 00-301	Trans BC 547 C		Q 411
29 021 00-301	Trans BC 547 C		Q 412
29 022 00-301	Trans 2 SC 1317-S		Q 413
29 022 00-301	Trans 2 SC 1317-S		Q 414
Dioden			
Diodes			
29 023 00-304	Diode Kap. SD 117		D 1
03 400 00-3042	Diode 1 N 60		D 2
03 400 00-3042	Diode 1 N 60		D 403—406
29 024 00-3042	Diode 1 N 60 PR		D 3
29 024 00-3042	Diode 1 N 60 PR		D 4
29 025 00-3042	Diode 2 DA 90		D 5
11 241 00-3041	Diode 1 N 4148		D 5
11 241 00-3041	Diode 1 N 4148		D 401
11 241 00-3041	Diode 1 N 4148		D 402
11 239 00-3041	Diode 1 N 4002		D 201 + 208
11 239 00-3041	Diode 1 N 4002		D 202
11 239 00-3041	Diode 1 N 4002		D 203
11 239 00-3041	Diode 1 N 4002		D 204
11 239 00-3041	Diode 1 N 4002		D 205
11 239 00-3041	Diode 1 N 4002		D 206
11 239 00-3041	Diode 1 N 4002		D 207
11 239 00-3041	Diode 1 N 4002		D 208
29 026 00-3044	Z-Diode HZ 11 B 2		
29 009 00-3045	LED GL-9 NG 2 (grün)		LD 1
29 006 00-3045	LED GL-9 PR 2 (rot) Aufn.		LD 2
Spulen und Filter			
Coils and filters			
29 027 00-325	Antennenfilter	FM Band pass filter EXC-FF 881084	BPF 1
29 028 00-3252	Filter ZF-FM 8 A 6972	I.F.T. FM 154 FC-8 A 6972 DY	T 1
29 029 00-3252	Filter ZF-AM A 6193	I.F.T. FMC-A 6193 EK	T 2
29 030 00-3252	Filter 2 A 5045	I.F.T. RMC-2 A 5045 A	T 3
29 031 00-3252	Filter 7 A 6365	I.F.T. 154 AC-7 A 6365 YDG	T 4
29 032 00-3252	Filter 56006/N 6	I.F.T. 154 FC-56006/N 6	T 5
29 033 00-3252	Keramikfilter 10,7 MJ (FM)	Ceramic filter FM 10.7 M	CF 1/2
24 996 00-3252	Keramikfilter 465 kHz	AM Ceramic filter 465 kHz	CF 3
29 034 00-325	Spule 6 A 8034	Coil 6 A 8034	L 4
29 035 00-325	Spule MW		L 5
29 036 00-325	Spule LW		L 6
29 046 00-325	Spule		L 7
15 031 00-3252	Filter B 3 BN 4103	Coil CLN-A 1477 GO	LPF 1
15 031 00-3252	Filter B 3 BN 4103	Notch filter B 36 N 4103-32	LPF 2
26 992 00-3431	Ferritantenne	Notch filter B 36 N 4103-32	
29 037 00-317	Drehko	Bar antenna	
29 038 00-324	Trafo	PVC	
Buchsen			
Jacks			
26 487 00-3321	FM-Antennenbuchse	FM antenna socket D 2-713 N-01	C 01-029
29 039 00-332	Lautsprecherbuchse	Speaker socket D 2-714 N-00	C 01-20
29 005 00-3324	Kopfhörerbuchse	Head phone jack SG 8044	C 14-SG 8044
29 007 00-3326	Mikrofonbuchse	Mic jack SJ 836-1-010	C 14-SJ 836

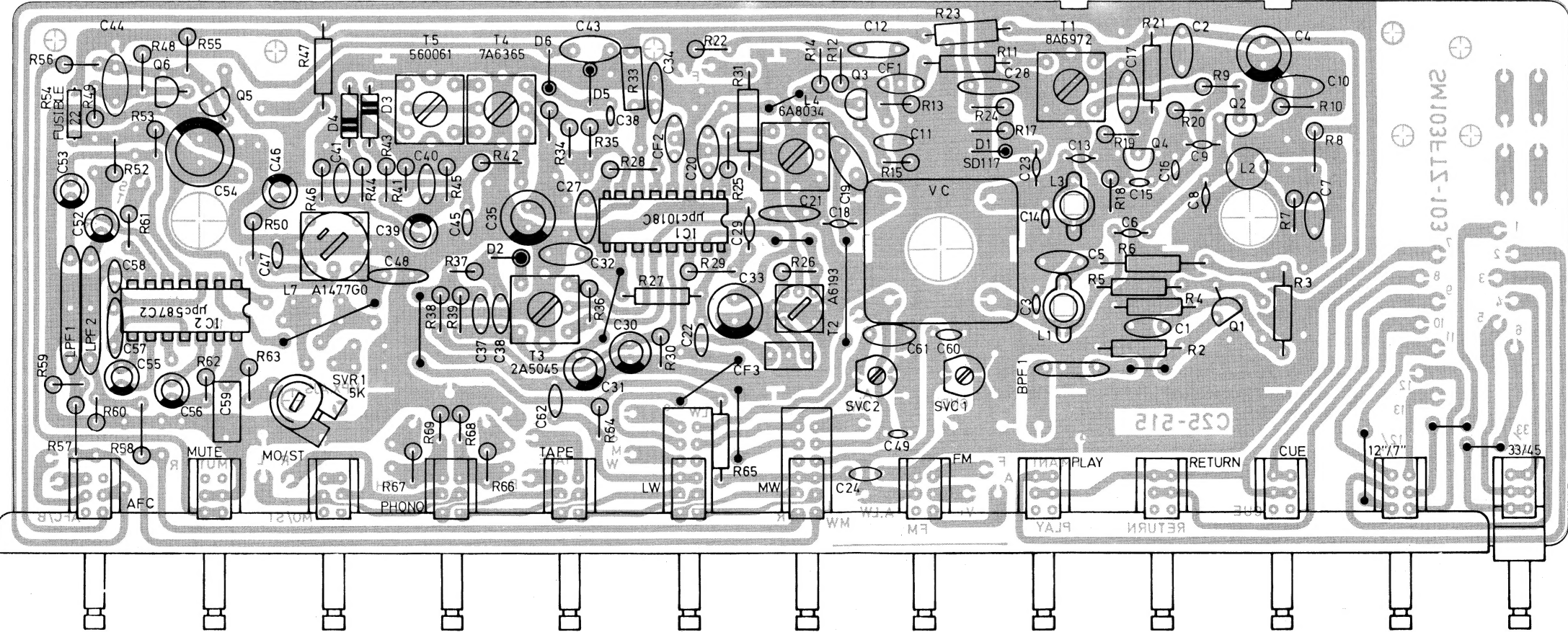
Bestell-Nr./Part No.	Bezeichnung	Description	Pos.-Nr./Ref. No.
Schalter			
29 982 00-3273	Netzschalter		
29 040 00-3276	Tastensatz 12fach		
29 041 00-3276	Tastenschalter 33/45		
29 047 00-3276	Tastenschalter		
29 048 00-3274	A/W-Schiebeschalter		
Schieberegler			
29 042 00-322	Schieberegler 100 K × 2 (EQ)		
29 043 00-322	Schieberegler BM 50 K (Vol.)		
Platinen			
26 989 00-500	HF-Platine		
26 983 00-500	NF-Platine		
26 980 00-500	Klangreglerplatine		
26 788 00-500	Kopfhörerbuchsenplatine		
26 789 00-500	Aufnahme-LED-Platine		
26 790 00-500	Mikrofonbuchsenplatine rechts		
26 791 00-500	Mikrofonbuchsenplatine links		
26 988 00-500	Stereo-LED-Platine		
26 993 00-500	A/W-Platine		
26 999 00-500	Wiedergabeplatine		
Lampen			
26 984 00-3291	Skalenlampe oben		
29 008 00-3291	Skalenlampe unten		
Switches			
	Power switch SDL 1 P		C 22-131
	Switch push 12 F SUJC 3 A		C 22-125
	Switch push 33/45		C 22-127
	Switch push		C 22-132
	Recording switch		C 40-013
Controls			
	Slide VR VJ 3023-2 GPVN 20 CP		C 31-037 VR 1-4
	Slide VR VJ 3023-2 PVN 20 CP		C 31-038 VR 5/6
P.C.B.'s			
	Tuner board		C 25-515
	Audio board		C 25-517
	Tone board		C 25-516
	Headphone board		C 25-479
	Rec. LED board		C 25-474
	Mic jack board (r)		C 25-473
	Mic jack board (l)		C 25-491
	Stereo LED board		C 25-475
	Record board		C 25-507
	Play cassette board		C 25-490
Lamps			
	Bulb (upper) 6 V/70 mA		C 05-195
	Bulb (lower) 6 V/70 mA		C 05-194

Rundfunk-Platinen
Receiver P.C.B.

Leiterbahnseite Wiring view

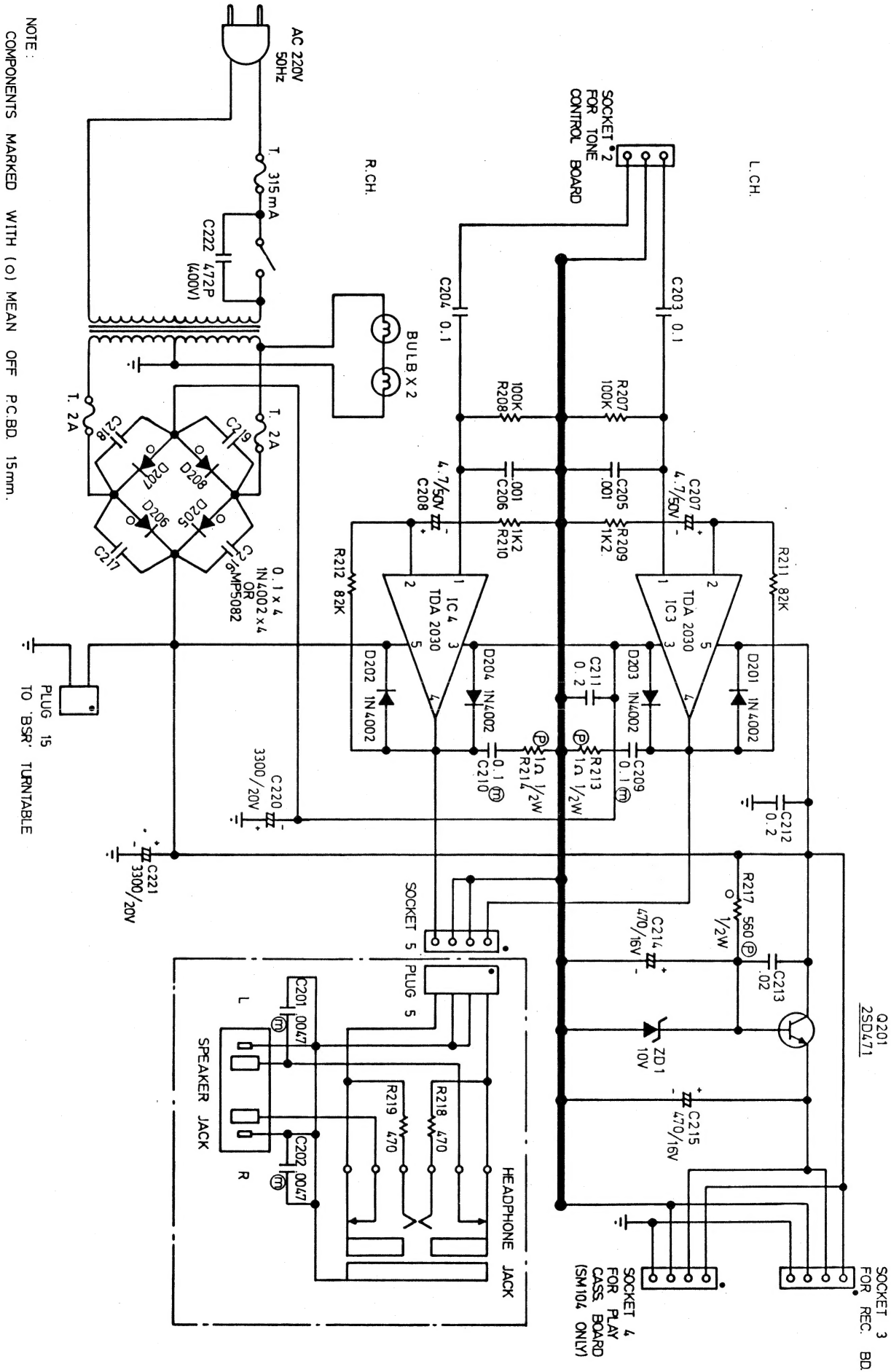


Bestückungsseite Component view



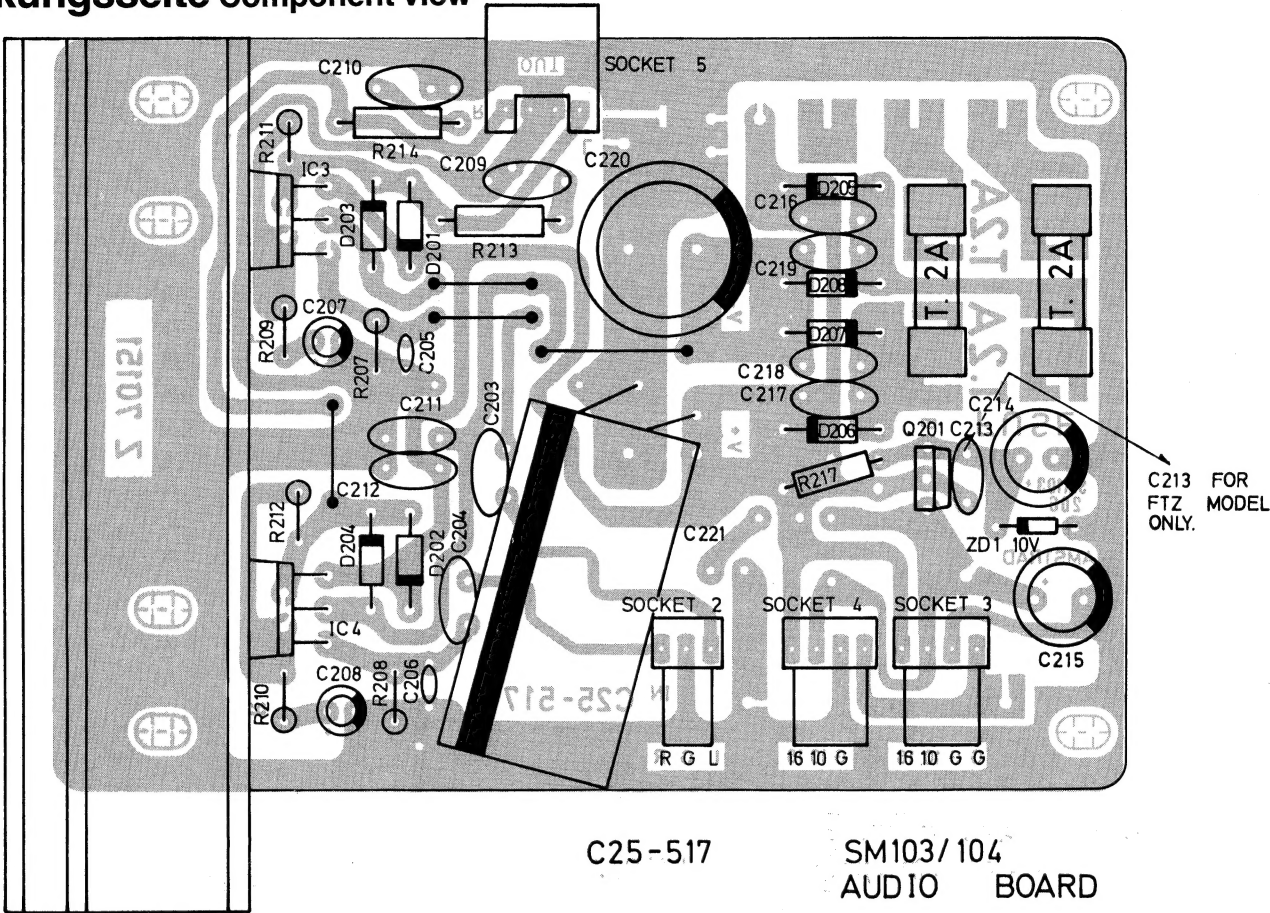
Schaltbild Audioplatine

Circuit diagram audio P.C.B.

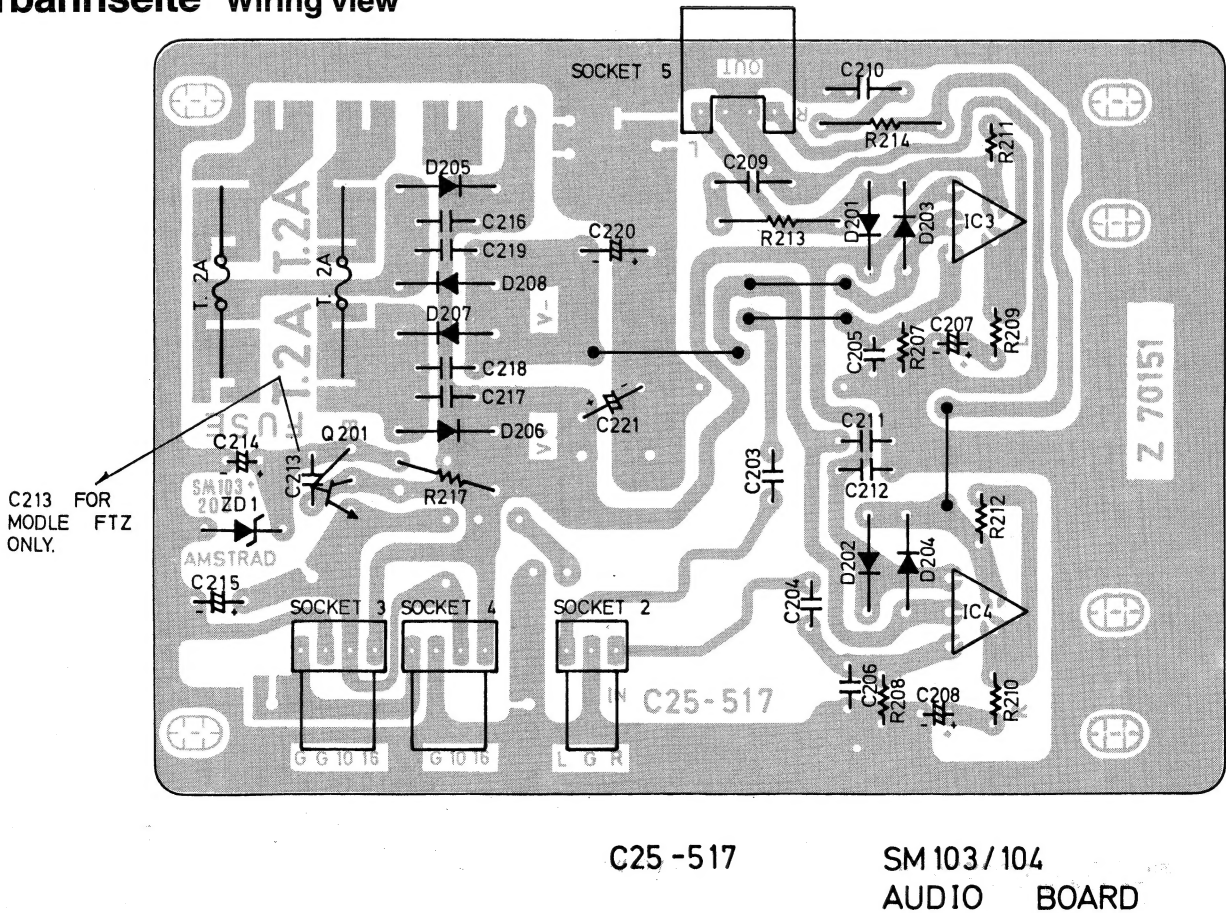


Audio-Platine
Audio P.C.B.

Bestückungsseite Component view

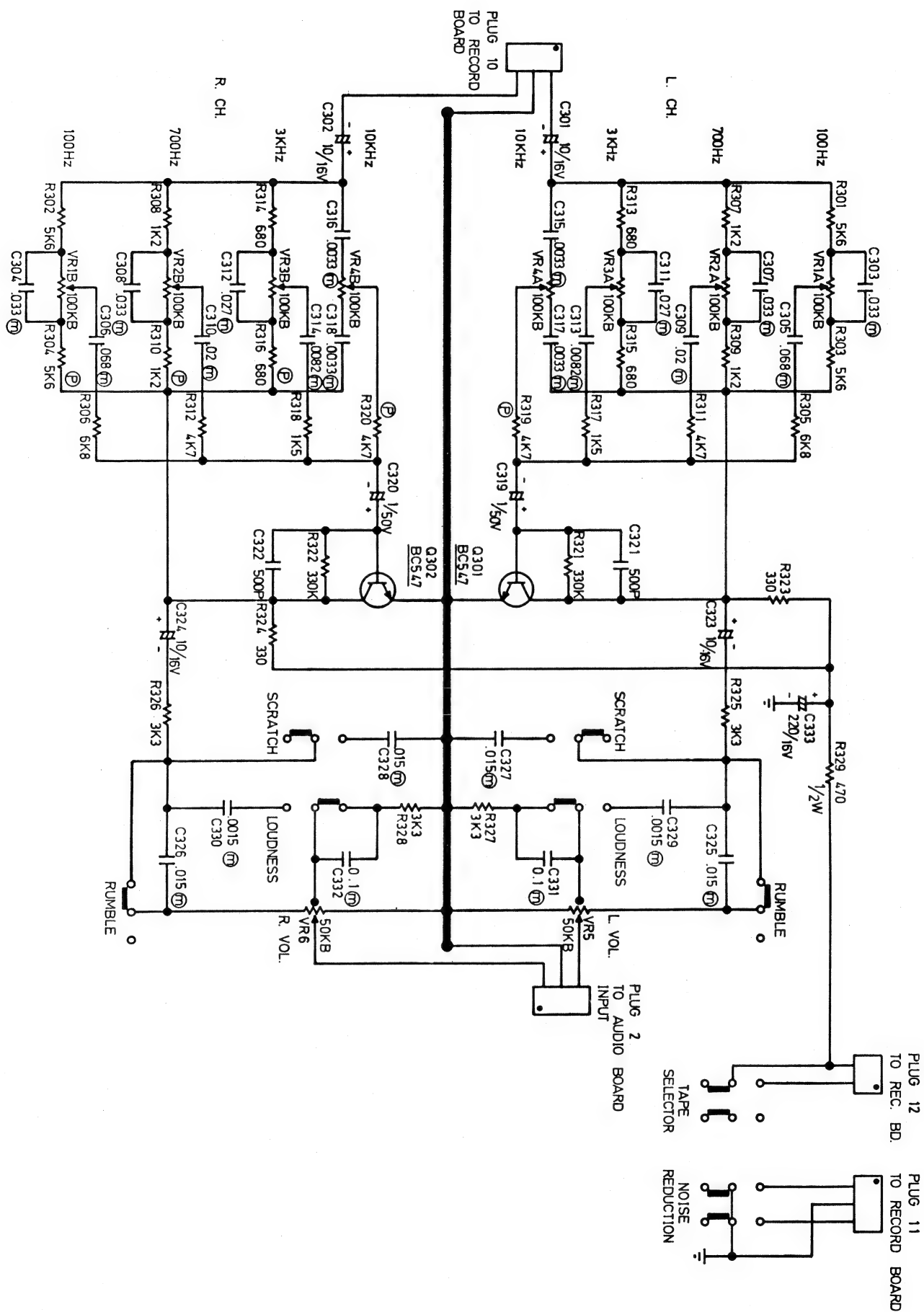


Leiterbahnseite Wiring view



Schaltbild Klangreglerteil

Circuit diagram tone P.C.B.



Tone control P.C.B.

Wiring view

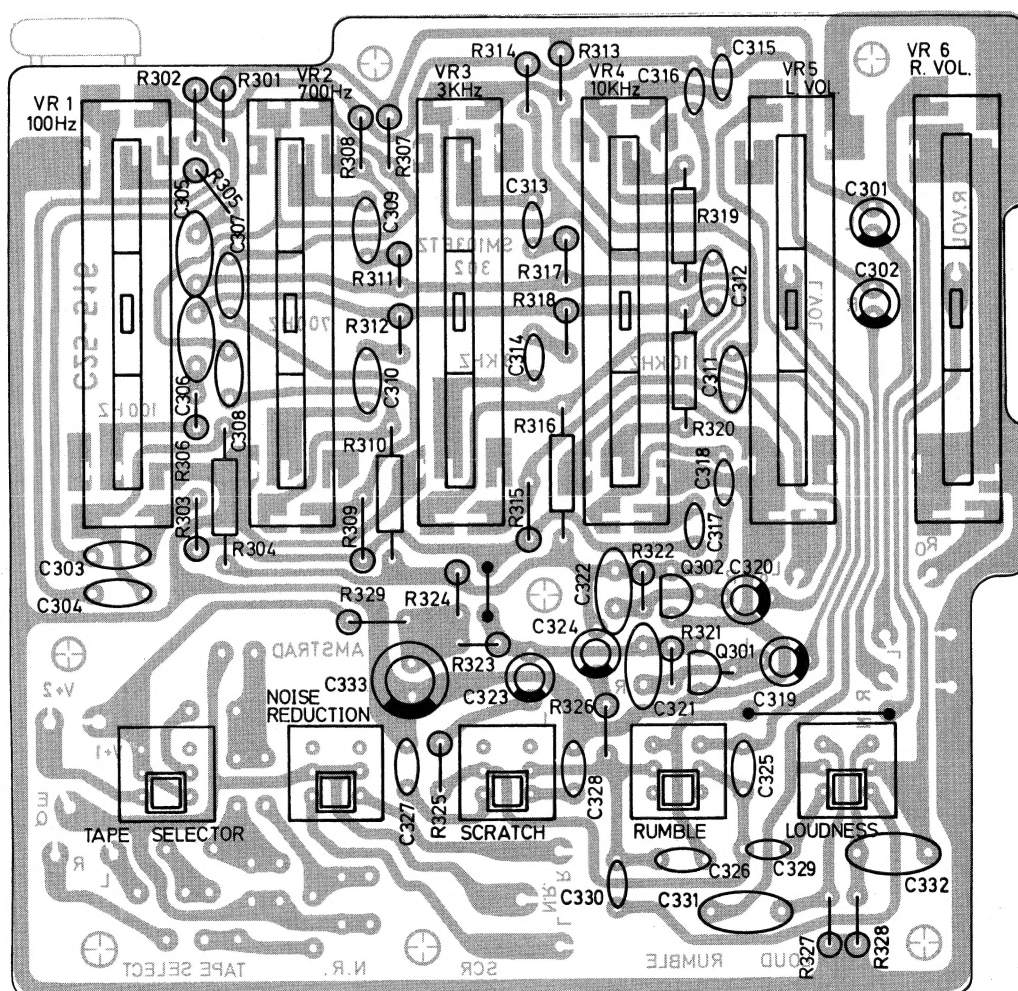
TONE CONTROL BD.

Bestückungsseite

Component view

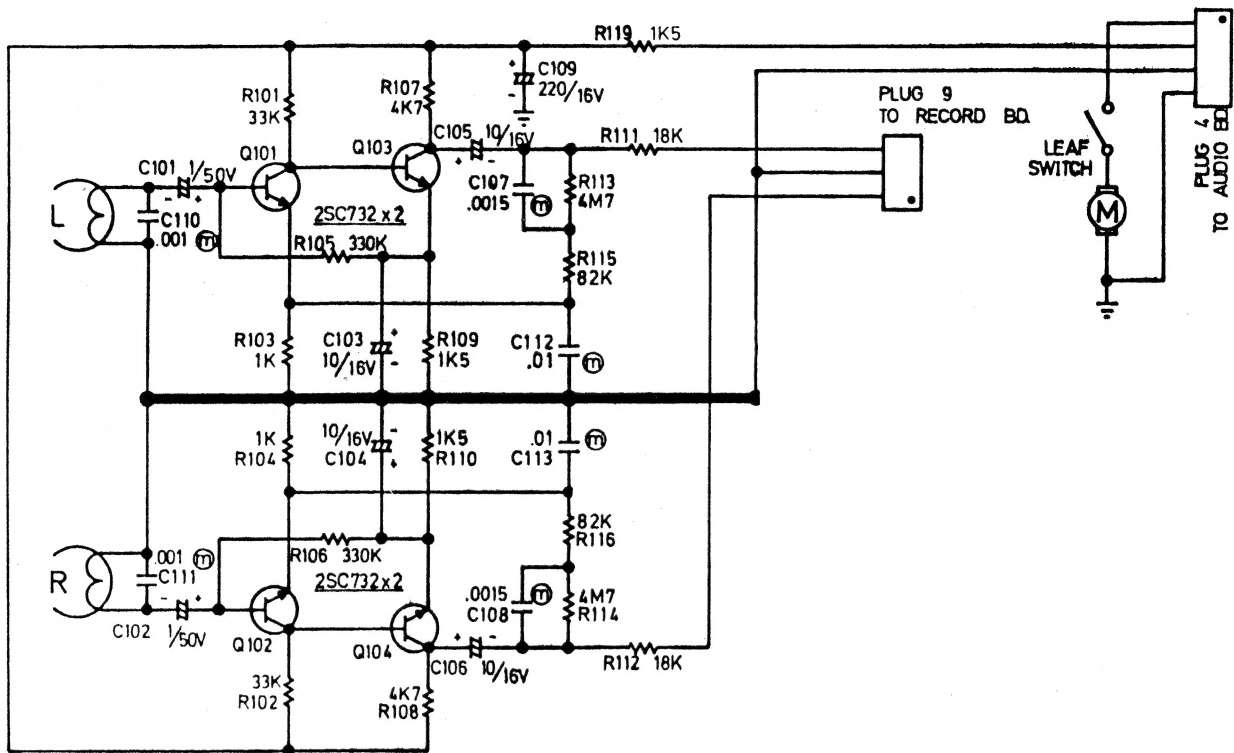
C25 - 516

SM 103 / 104 FTZ
TONE CONTROL BD.



Schaltbild Wiedergabe Cassettenteil

Circuit diagram play-cass.-deck



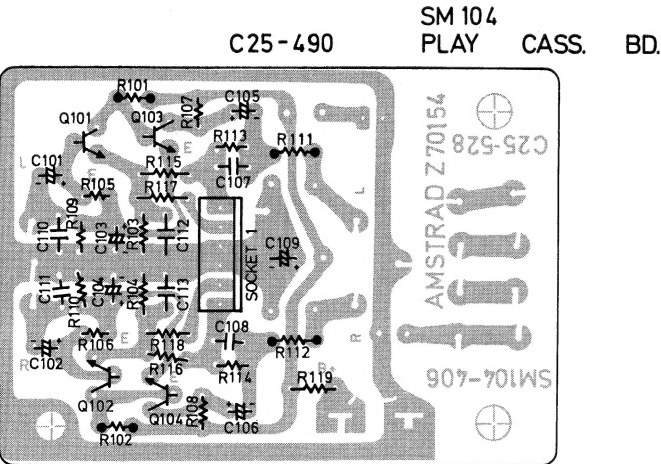
Wiedergabeplatine

Play P.C.B.

Leiterbahnseite

Wiring view

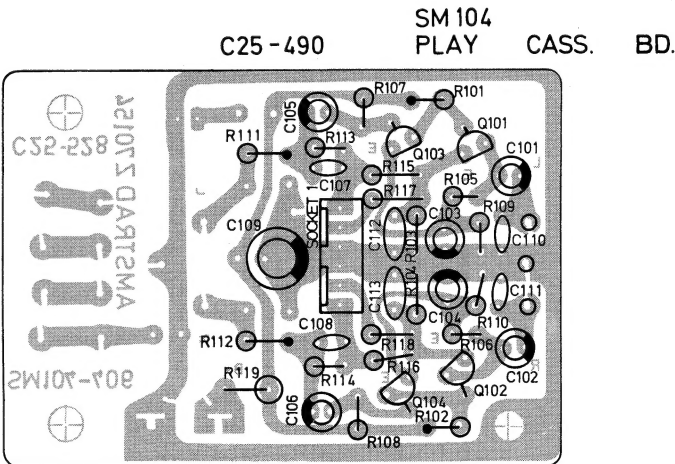
WIRING VIEW
SCALE 2 : 1



Bestückungsseite

Component view

COMPONENT VIEW
SCALE 2 : 1



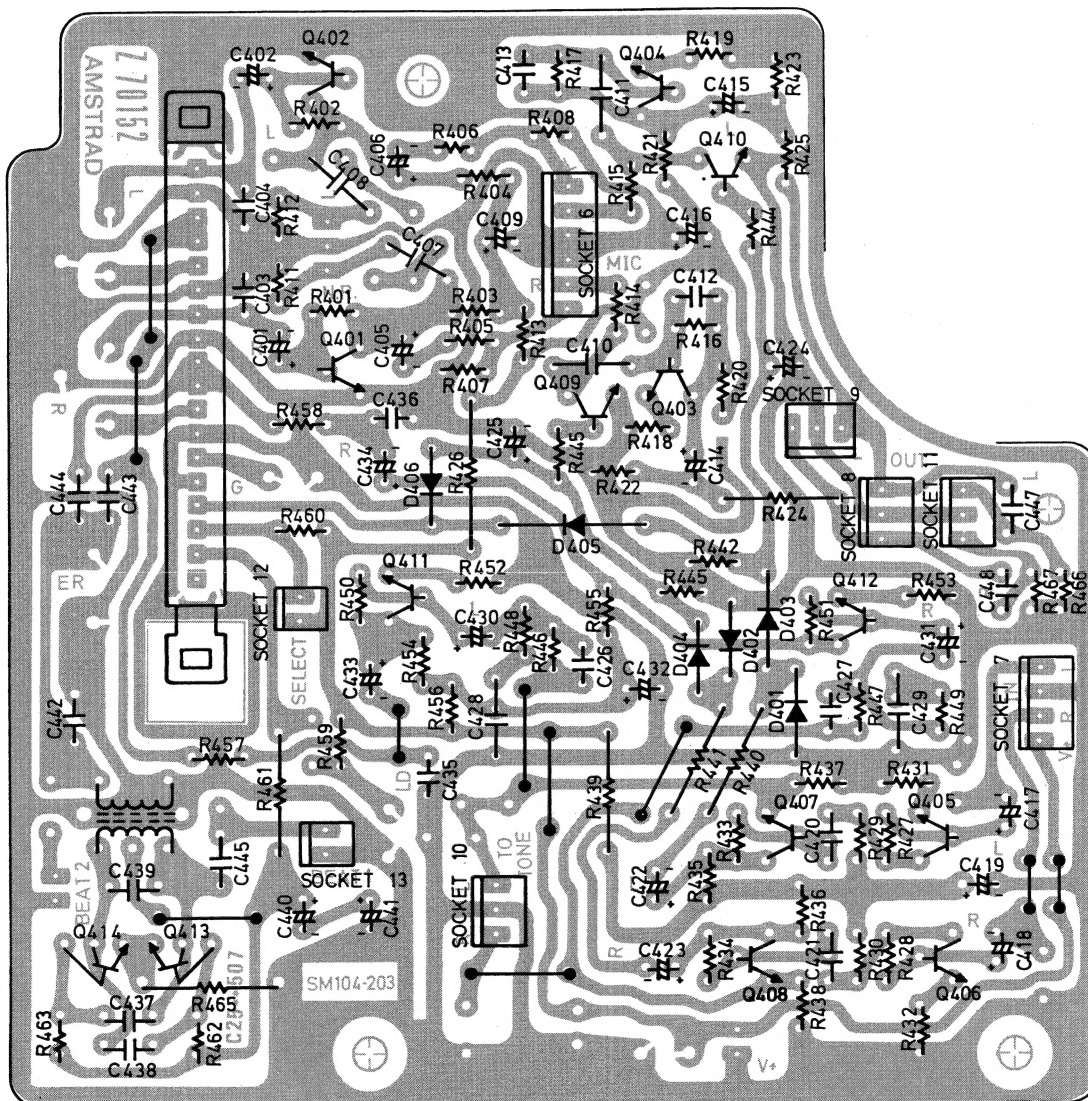
A/W-Platine
Rec./play P.C.B.

Leiterbahnseite
Wiring P.C.B.

SCALE 2 : 1

C25 - 507

SM 103/104
RECORD BOARD



Bestückungsseite

Component view

COMPONENT VIEW

SCALE 2 : 1

SM 103/104

RECORD BOARD

C25 - 507

